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Steffen Junghanns

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EXAMINER

WANG-HURST, KATHY W

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,407	Applicant(s) JUNGHANNS ET AL.	
	Examiner KATHY WANG-HURST	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 12/8/2009 has been entered. Claims 16-31 are still pending in this application.

Response to Arguments

1. Applicant's arguments filed 12/8/2009 have been fully considered but they are not persuasive.

Regarding the applicant's arguments that prior art of record, the combination of Witzel and Bachmann, fails to disclose or suggest performing a transcoder-free operation connection between terminals at the radio network controller (see pages 5-6), the examiner respectfully disagrees. Witzel discusses starting accessing from a radio network controller and generating an initial codec list that is supported by the terminal device and all the network nodes. Witzel discusses determining the codecs that are supported by the terminal device and all the nodes on the network which includes radio network controller. Witzel discusses establishing a transcoder-free operation and selecting only codecs supported by the terminal device and all the network nodes. See e.g. Witzel [0116][0117][0120]). Witzel does not specifically elaborate the radio network controller's active role in the codec selection process. Bachmann is brought to show such feature is well known to one skilled in the art. Bachmann discusses a Radio Network Controller in a mobile radio network negotiates a set of AMR modes with a switching center via which the speech connection is intended to be set up before a speech connection is set up. Therefore the combination of Witzel and Bachmann shows

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the limitations of “checking in a radio network controller, upon receipt of a request from a switching unit relating to use of at least one subset of at least one codec mode configuration for establishment of a transcoder-free operation connection, whether the at least one requested subset is supported by the radio network controller; if the at least one subset of the at least one codec mode configuration is supported by the radio network controller, establishing a transcoder-free operation connection to the switching unit and a communication terminal and restricting a codec mode configuration to be used for transmission of data to the subset; and signaling, from the radio network controller to the communication terminal, at least one message relating to the subset of the at least one codec mode configuration to be used for transmission of data”.

Regarding the applicant’s arguments that the combination of Witzel and Bachmann fails to suggest or teach the step of restricting the codec mode configuration to the subset (see page 7), the examiner respectfully disagrees. Witzel discusses limiting the codec list to the ones that are supported by all the network nodes by finding the intersection of the supported codecs ([0117][0120]). Therefore the prior art does teach the step of restricting the codec mode configuration to the subset.

Concerning the combination of references, both of the references are from the same field, i.e. communication systems and concern analogous topics. Therefore, the examiner contends that the references would be combinable to one skilled in the art.

Therefore, the argued limitations read upon the cited references or are written broad such that they read upon the cited references, as follow.

Claim Rejections - 35 USC § 103

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Witzel (US 2007/0171841) in view of Bachmann (US 7577152).

Regarding claim 16, Witzel discloses a method for establishing a transcoder-free operation connection between two communication terminals in a communication network (see e.g. Abstract and [0116][0117]), comprising:

checking in a radio network controller ([0116] access starting from a radio network controller), upon receipt of a communication from a switching unit relating to use of at least one subset of at least one codec mode configuration for establishment of a transcoder-free operation connection ([0117] first originating network node e.g. a mobile switching center generates an initial supported codec list), whether the at least one requested subset is supported by the radio network controller ([0117] [0124] determine supported codecs); if the at least one subset of the at least one codec mode configuration is supported by the radio network controller (see e.g. [0124][0117] intersection of codecs supported by the terminal device and all the network nodes), establishing a transcoder-free operation connection to the switching unit and a communication terminal and restricting a codec mode configuration to be used for transmission of data to the subset (see e.g. [0117] [0124] TFO-TrFO harmonization is the first step to establish a transcoder-free operation, and selecting only codecs

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supported by the terminal device and all the network nodes, therefore restricting the codec mode configuration to be used); and signaling (see e.g. Fig. 7 items 40 and 46), from the radio network controller to the communication terminal ([0116][0117]), at least one message relating to the subset of the at least one codec mode configuration to be used for transmission of data ([0121] the originating or terminating leg will be informed of decided codecs, therefore signaling from network to mobile terminal).

Witzel discloses a radio network controller communicating with switching center relating to the use of at least one subset of at least once codec mode configuration for establishment of a transcoder-free operation connection but does not specifically disclose the radio network controller receiving a request from the switching center relating to the use of at least one subset of at least once codec mode configuration for establishment of a transcoder-free operation connection. Bachmann teaches radio network controller negotiating with the switching center to establish proper codec configuration which involves having radio network controller receiving and replying the codec mode selection requests (col. 1 lines 35-58).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Witzel, to have the network controller taking active role in the codec selection process by negotiating with switching center, thus allowing a smooth roaming and handovers between technically different networks (col. 21 lines 30-35).

Regarding claim 17, Witzel discloses a method according to claim 16, wherein at least a part of at least one message relating to the at least one codec mode

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configuration to be used with at least two codec modes is signaled from the radio network controller to the communication terminal for the transmission of data in an uplink direction ([0117] and fig. 7 items 46, 40, 45 and 47, from mobile station to network controller therefore uplink direction).

Regarding claim 18, Witzel discloses a method according to claim 17, further comprising signaling from the radio network controller to the communication terminal at least a further part of at least one message relating to the at least one subset of the at least one codec mode configuration to be used for the transmission of data in the uplink direction ([0117]).

Regarding claim 19, Witzel discloses a method according to claim 18, wherein the radio network controller supports all subsets of a supported codec mode configuration ([0042]).

Regarding claim 20, Witzel discloses a method according to claim 19, wherein the transcoder-free operation connection is established from the radio network controller to the communication terminal using a codec mode configuration supported by the radio network controller ([0042]).

Regarding claim 21, Witzel discloses a method according to claim 20, wherein the codec mode configuration represents a combination of at least two codec modes (Fig. 3 at least two codec modes).

Regarding claim 22, Witzel discloses a method according to claim 21, wherein the communication network is a cellular mobile radio network (Fig. 1).

Regarding claim 23, Witzel discloses a method according to claim 22, wherein a radio resource control signaling is used by the radio network controller for signaling to the communication terminal (Abstract).

Regarding claim 24, Witzel discloses a method according to claim 23, wherein a mobile radio terminal, mobile computer and/or mobile organizer is used as the communication terminal (Abstract).

Regarding claim 25, Witzel discloses a radio network controller for establishing a transcoder-free operation connection between two communication terminals in a communication network having a switching unit and mobile network units, comprising: send and receive units communicating with the mobile network units ([0117] mobile terminals therefore have send and receive units communicating with mobile network units); and at least one processing unit checking a request sent from the switching unit relating to use of a subset of a codec mode configuration for establishment of a transcoder-free operation connection to determine whether the requested subset is supported by the radio network controller ([0117] a list of codecs is generated and direct codecs are determined, therefore at least one processing unit), establishing a transcoder-free operation connection to the switching unit if the subset of the codec mode configuration is supported by said radio network controller ([0117] harmonization process is the first step to establish transcoder-free operation), restricting a codec mode configuration to be used for transmission of data to the subset (see e.g. [0117][0124] limiting only to codecs that are supported by the terminal and all the network nodes), and signaling a message relating to the subset of the codec mode configuration to be

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used for the transmission of data via said send unit to a communication terminal included among the mobile network units ([0121] the originating or terminating node will be informed of the decided codec).

Witzel discloses a radio network controller communicating with switching center relating to the use of at least one subset of at least once codec mode configuration for establishment of a transcoder-free operation connection but does not specifically elaborate the radio network controller receiving a request from the switching center relating to the use of at least one subset of at least once codec mode configuration for establishment of a transcoder-free operation connection. Bachmann teaches radio network controller negotiating with the switching center to establish proper codec configuration which involves having radio network controller receiving and replying the codec mode selection requests (col. 1 lines 35-58).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Witzel, to have the network controller taking active role in the codec selection process by negotiating with switching center, thus allowing a smooth roaming and handovers between technically different networks (col. 21 lines 30-35).

Regarding claim 26, Witzel discloses a radio network controller according to claim 25, wherein said radio network controller signals at least a part of at least one message relating to the codec mode configuration to be used with at least two codec modes for the transmission of data in an uplink direction to the communication terminal ([0117]).

Regarding claim 27, Witzel discloses a radio network controller according to claim 26, wherein said radio network controller signals at least a further part of at least one message relating to the at least one subset of the codec mode configuration to be used for the transmission of data in the uplink direction to the communication terminal ([0117] and Fig. 7).

Regarding claim 28, Witzel discloses a radio network controller according to claim 27, wherein the communication network is a cellular mobile radio network (Abstract and Fig.1).

Regarding claim 29, Witzel discloses a radio network controller according to claim 28, wherein the mobile network units include at least one of a mobile radio terminal, a mobile computer and a mobile organizer (Abstract and Fig. 1).

Regarding claim 30, Witzel discloses a device according to claim 29, wherein the codec mode configuration is a combination of at least two codec modes ([0117]).

3. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Witzel in view of Bachmann (US 7577152), and further in view of Twiss (US 2006/0168318).

Regarding claim 31, the combination of Witzel and Bachmann (US 7577152) discloses a method according to claim 16, but does not specifically disclose a Transport Combination Control Message is used by the radio network controller for signaling to the communication terminal. Twiss discloses a network controller signaling transport control messages to network portions ([0026]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the invention of Witzel and Bachmann, to signal

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transport messages to network elements as taught by Twiss, thus allowing a reduced traffic in a network ([0026]).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHY WANG-HURST whose telephone number is (571) 270-5371. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHY WANG-HURST/
Examiner, Art Unit 2617

/NICK CORSARO/

Supervisory Patent Examiner, Art Unit 2617